## When Is 'Yes to the Mill' Environmental Justice? Interrogating Sites of Acceptance in Response to Energy Development

Abstract: Though grassroots organizations have mobilized against US environmental injustices since the 1980s, academic definitions of environmental justice (EJ) remain limited in important ways, including: a tendency to privilege cases where activists achieve a successful, 'tidy' outcome; inattention to roles natural resource dependence and free market systems play in structuring environmental inequality; and a tendency to under-analyze alternative notions of EJ that result, utilized by activists who prioritize local autonomy and procedural justice in land-use decision making. Here, I argue that these alternative notions of EJ help mobilize divergent forms of EJ activism—'sites of resistance' to industrial production systems and their risks, and 'sites of acceptance' to those same practices. To illustrate, I explore extensive mixed method data in the context of energy development and sites of acceptance related to uranium production in the southwestern United States. I show how alternative notions of EJ are shaped by identification with uranium production, persistent poverty and economic insecurity, and faith that increased uranium production will fuel US nuclear power production and help combat global climate change.

#### 1. Introduction

The Visitor's Center in Naturita, Colorado, occupies a modest space filled with posters of area landmarks, maps, and brochures describing nearby recreation and archaeological sites. But the neon orange sign hung high on the Center's rear wall captures your attention first; 'Yes to the Mill!' its stark black letters exclaim. The center's volunteers, a few friendly local women, greet me and other visitors with eager discussion about the possibility of a new uranium mill down the road. They hand me 'Yes to the Mill!' stickers and excitedly predict economic, social, and cultural revitalization for nearby communities if Energy Fuels Resources builds Piñon Ridge Uranium Mill in Paradox Valley. They know the industry and uranium better than most Americans, they explain. Their daughters and sons would no longer have to clean homes or hotels in Telluride if the mill is built, they tell me; never have to make that sheer, twisting winter drive to work in the famous ski community.

Tucked into the vast Colorado Plateau, Naturita and Nucla, Colorado—rural, natural resource dependent communities—are located near the Piñon Ridge Ura-

nium Mill's proposed location. This mill captures national attention because it is the first US uranium mill permitted in over thirty years, due in large part to US public resistance to living near industrial facilities (Hessler 2010). The mill's construction also captures attention because it mobilizes unusual levels of consistent community support. Further, operating with state-of-the-art technology and "under a strict regulatory environment" (http://www.energyfuels.com/development\_projects), the Mill embodies one US strategy to address climate change—using controversial but low-carbon energy options like nuclear power, fueled by uranium. While some activists mobilize around traditional notions of environmental justice to fight the industry, in Nucla and Naturita vitally different notions of environmental justice mobilize support for uranium's industrial production.

Mobilized grassroots support for renewed uranium production creates what I term 'sites of acceptance' in communities like Nucla and Naturita. Activists in sites of acceptance utilize provocative notions of environmental justice (EJ) that privilege local autonomy regarding land use decisions, above other environmental concerns like pollution or health outcomes, particularly in communities where poverty and energy development intersect. I utilize the terms 'sites of resistance' and 'sites of acceptance' to refer to mobilized opposition or support, respectively, for industrialized land uses and their socio-environmental risks. Unlike sites of resistance, which permeate sociological EJ research (Mohai et al. 2009), sites of acceptance and definitions of EJ utilized by activists in them have been underexplored (Walker 2012). Current sociological research thus constrains working definitions of EJ, tending to: privilege cases where activists achieve successful, tidy outcomes; marginalize alternative notions of EJ utilized by activists who prioritize local autonomy and procedural justice in land-use decision making above concerns over potential contamination or other risks; and under-analyze effects of neoliberalized free market systems in structuring environmental inequality and shaping EJ activism. This article aims to address that gap.

Significantly, sites of acceptance examined here mobilize in a region still reeling from uranium's socio-environmental legacies—and where other activists mobilize sites of resistance (Author 2010; 2011; Brugge et al. 2006; Kuletz 2004). But as strong local support for renewed uranium production mobilizes, social scientists must ask: What notions of EJ help mobilize sites of acceptance? Under what conditions do these notions of EJ mobilize people to *support* heavily-industrialized energy development? These become increasingly relevant sociological concerns as industrialized practices like mining, hydraulic fracturing, and other extraction activities proliferate near residential areas where people hold diverse 'notions of EJ' (Schlosberg 2004; 2013).

In the following article, I utilize a community-level case study of alternative EJ activism to show how mobilization in Nucla and Naturita represent EJ sites of acceptance to renewed uranium production. I identify conditions that help mobilize sites of acceptance and explore alternative notions of EJ utilized by activists in them. In a neoliberal era with rapid unconventional energy development, this study fills a gap by analyzing how citizens conceptualize EJ in contexts where market-based discourse has become hegemonic.

# 2. A Review of the Environmental Justice Literature: Privileging 'Sites of Resistance'

Social scientists have examined US-based EJ activism for decades. Overall, sociological studies focus on EJ organizations that mobilize 'sites of resistance' to industrial development's risks; in these sites, activists share transformative notions of EJ like: concerns over environmental health (Pellow/Brulle 2005); inequitable contamination of poor or minority communities (Szasz/Meuser 1997); and sustainability of resource-intensive capitalist production systems (Faber/McCarthy 2003; Walker 2012). Activists in 'sites of acceptance', however, have been less visible and less studied (Walker 2012; Pellow 2002; Lake 1996); in these sites, activists utilize important alternative notions of EJ, particularly prioritizing community autonomy in making land use decisions above contamination or other risks related to heavy industrial practices (Sze/London 2008)

### 2.1 Terms and Trajectories

Environmental justice' embodies various notions because a vast array of social groups, organizations, and scholars have deployed the term in unique ways. For many sociologists, EJ means that "all people and communities are entitled to equal protection of environmental and public health laws and regulations" (Mohai et al. 2009, 406), and that all people have a right to feel safe where they live, work, and play (Szasz/Meuser 1997). For many scholars and activists, EJ includes radical shifts in regulatory frameworks, governance, production technologies, and/or power in society (Harrison 2012). Increasingly, EJ includes local autonomy in land use decisions, especially via citizens' appeals to procedural equity (Lake 1996; Schlosberg 2004; Sze/London 2008). I assert, then, that the term EJ, and the ways activists deploy it, is dynamic and continues to change across time and space.

Contemporary scholars encourage increased reflexivity and acknowledgement of experiential notions of justice when defining EJ, noting that important meanings of EJ were marginalized as scholars worked to create concise definitions. Indeed, contemporary scholars argue that "various experiences and articulations of injustice inform how the concept is used [...] in practice; [and] engagement with what is articulated on the ground is of crucial value to [...] development of the concepts we study" (Schlosberg 2004, 50). Researchers increasingly recognize that EJ activism is about "the material relationships between human disadvantage and vulnerability and the condition of the environment and natural world in which that experience is immersed" (Schlosberg 2004, 51). This concept is broader, bigger, and more inclusive than most definitions of EJ I initially described. I aim to push this inclusivity further by interrogating notions of EJ in communities where people most directly experience relations between 'human disadvantage' and 'condition of the environment' as natural resource dependence and persistent poverty in contaminated environments. Otherwise, ignoring activists' articulations of EJ reifies narrow, historically-specific notions of justice.

More specifically, sociologists tend to idealize EJ activism, especially decisions made democratically or within communities (Walker 2012, ch. 2). While radical analysts Lake (1995), Pulido (1996), and Faber (2008) argue that EJ activists should revolutionize notions of procedural justice to include new production systems as they agitate for deep democracy, even these analysts assume that activists' notions of EJ will be inherently transformative and produce fundamental social change. For instance, Lake (1995, 170) suggests that "by democratic participation in the capital investment decisions through which environmental burdens are produced and communities affected", siting decisions and turf wars will become outmoded (cf. Walker 2012, 101). Still, sociologists must avoid identifying as EJ 'sites of acceptance' circumstances where mobilized activists are instead unaware of their social disadvantage or where environmental blackmail might be involved (Walker 2012, 94), especially when communities have been historically marginalized and may accept industrial production only to secure their economic futures (Krakoff 2002). Empirical evidence has not yet established that decisions made at the community level, or realizations of community-based procedural justice, will utilize solely transformative, progressive notions of EJ and uniform sites of resistance. Here, I attempt to make the concept of EJ both more inclusive and less idealized so that we can understand how the term 'EJ' shifts over time and space.

### 2.2 Privileging Sites of Resistance over Sites of Acceptance

Sites of resistance are sociologically tidy and possess transformative potential. Sociologists thus present them as the embodiment of EJ. Love Canal, New York, and Warren County, North Carolina, became archetypal US sites of resistance (Levine 1982; Szasz/Meuser 1997), though later analyses showed that community members did not utilize uniformly progressive notions of EJ even in Love Canal (Gunter/Kroll-Smith 2011). Prominent activism in these communities sparked a flurry of research (Pulido 1996; Sze/London 2008), through which clear patterns emerged: members of low-income communities (Bryant/Mohai 1992; Bullard 1993; 1994; Hofrichter 1993), racial/ethnic minority groups (US GAO 1983; Bullard 1983; UCC Report 1987), and/or of indigenous groups "confront[ed] a higher burden of environmental exposure from air, water, and soil pollution from industrialization, militarization, and consumer practices" (Mohai et al. 2009, 406). Uniform EJ sites of resistance mobilized to combat these inequalities in various industrialized and militarized contexts, including: toxic and chemical pollution in the South's Cancer Alley area (Allen 2003; Lerner 2005); US sacrifice zones (Lerner 2012); military and hazardous wastes that created sacrifice zones in rural, often Native American or marginalized communities (Author 2010; Hooks/Smith 2004; 2005; Ishiyama 2003; Kuletz 2001); impacts of industrial facilities like US Steel (Hurley 1995); and health outcomes related to pesticide exposure (Harrison 2008; 2012; Pulido 1996). On the other hand, mobilization related to long-term land use decision-making, procedural equity, or alternative notions of EJ has been less robustly covered (Walker 2012; Roberts/Toffolon-Weiss 2001).

EJ theorists focused largely on sites of resistance as well, characterizing mobilization as inherently transformative. For instance, EJ activists have been shown to experience dramatic losses in trust in democratic and regulatory systems, often mobilizing transformative sites of resistance (Cable/Benson 1993; Cable/Cable 1994; Cable/Mixer 2011). Taylor's Environmental Justice Paradigm (2000) interprets EJ movements as powerful master frames, transforming communities if issues are salient enough. Environmental health social movements have also been characterized as transformative sites of resistance to current individualized definitions of health and modes of healthcare delivery (CIRG 2012; Cable et al. 2010; Brown 2007). While Harrison (2012) has identified varied 'conceptions of justice' that guide EJ activists, even she still characterizes notions of EJ as inherently transformative.

Sites of acceptance have of course made appearances in the EJ literature. Community acceptance of industrial waste siting, signaled by sites of acceptance, has been analyzed rather negatively as resulting from 'environmental blackmail' (Bullard 1992). Pellow's Garbage Wars (2002) touches on Chicago's Robbins community, where activists mobilized to recruit a corporate waste incinerator to their neighborhood, but he does not formally analyze community acceptance even in his crucial theory of Environmental Inequality Formation (2000). Historian David Lewis (2007) analyzed active support among Goshute Indians for storing nuclear waste in Skull Valley Indian Reservation, in order to combat persistent poverty. In Orchid Island, Taiwan, two indigenous groups supported storing nuclear waste on their land until massive public protests mobilized (Walker 2012, 99). Harvey (1996; cf. Harvey 1973, 81) has noted a paradox across cases, where wealthy communities are less willing to sacrifice their natural amenities than are poor communities and people, though the wealthy can afford those costs more readily.

Even taken together, though, these approaches do not systematically interrogate alternative notions of EJ related to land use. They fail to capture how activists' notions of EJ are fluid, dialectical, and contextual (Schlosberg 2013). They fail to capture what really happens when technological risks and disasters related to industrial systems manifest—how community members debate sources of contamination, community impacts, appropriate development options, and desired outcomes of activism (Cline et al. 2010; Kroll-Smith/Couch 1990). This tendency has spread to and shaped other disciplinary lenses. For example, until recently, geographers also highlighted sites of resistance (Castree 2008; 2010) where activists utilized similar notions of EJ. This includes: movements related to water privatization and delivery (Bakker 2001; 2003; Prudham 2004; Perrault 2008); forests and forest management (Grandia 2007; Heynen/Perkins 2005); mining (Bury 2004; 2005; Rodrigues 2003); and agriculture (Brown/Getz 2008; Harrison 2008; Sugden 2009).

## 2.3 Social Science Tools for Assessing Sites of Acceptance

Other lenses offer perspectives to sharpen how EJ scholars portray and interpret activists' notions of EJ. Sociological work on natural resource dependence offers

important tools for analyzing ways in which contemporary "material relationships between human disadvantage [...] and the condition of the environment" (Schlosberg 2013, 51) shape alternative notions of EJ. Strong links exist between economic dependence and extractive industries, including high rates of persistent poverty (Peluso et al. 1994), economic volatility accompanying boom-and-bust cycles (Krannich/Luloff 1991; Freudenburg 1992); and general social disruption (Jacquet 2011; Smith et al. 2001). Notions of EJ and goals of activism in natural resource dependent places remain under-studied, however, despite lessons they offer for better understanding divergent notions of EJ that emerge under conditions of material deprivation.

Emerging research from geography more thoroughly analyzes what I term sites of acceptance. Geographers make stronger, uniform observations about the impacts of neoliberalism on notions of EJ as well—defined here as hegemonic modes of governance that privilege free markets and free trade, financialization, privatization of public goods, devolution of governance to smaller scales, and decreased funding for social safety nets like public healthcare. McCarthy (2005) finds that community forestry projects can act as "hybrids between neoliberalism and [...] natural resource management" (995), and concludes that community forestry groups in the US are more often co-opted by neoliberal values like free markets and deregulation than those in Canada (2006). Wilshusen (2010) shows how communities in southeastern Mexico utilized alternative notions of EJ that privileged free markets, as did members of the Movement for Landless Workers working for land reform (Wolford 2007). First Nation Alaskans have also been shown to adapt neoliberalized, market-based notions of EJ regarding their fisheries (Mansfield 2007). Valdivia (2005) uses processes of neoliberal subject formation in Ecuador to analyze how people's identities shifted to accommodate free market systems. Murray (2002) showcases similar outcomes among Australian farmers adapting to neoliberal policies, sometimes quite willingly. In US cases, Holifield (2004) concludes that EJ movements may be brought increasingly under the logics of neoliberalism by agencies like the Environmental Protection Agency. And Guthman (2008a and b) showcase how movements for healthier eating in California contribute to "neoliberal subject formation" (2008a, 1171).

While these studies show encouraging breadth, idealized working definitions of EJ still make it "difficult to say with certainty which factors lead both to the mobilization of local people against unwanted land use and to that group's success in fighting it" (2009, 418). This is particularly true regarding sites of acceptance, where notions of EJ are different. To more robustly analyze divergent notions of EJ, then, sociologists must more consistently analyze sites of acceptance. Below, using mobilized grassroots support in Nucla and Naturita as a representative case, I show how sites of acceptance supporting renewed uranium production have utilized alternative notions of EJ to mobilize support

<sup>&</sup>lt;sup>1</sup> Certain patterns have emerged about conditions leading to movements' success. For example, Roberts and Toffolon-Weiss 2001 found that movements meet more success when they preside over a protracted conflict with substantial media attention, especially at the national level. Further, women have been shown to lead EJ movements and use powerful rhetoric to inspire social movement activism (Peeples/deLuca 2006).

for the first uranium mill permitted in the US in over thirty years. Residents' alternative notions of EJ show important alternative conceptions of justice in the contexts of: local autonomy and rights of local communities to make land use decisions, identification with resources like uranium, and renewed industrial production offering progressive options for energy policy.

#### 3. Methods

This work is the product of on-going mixed-method ethnographic fieldwork conducted in US uranium communities since 2006. Methods include interviews, surveys, archival and document review, and extensive participant observation. I have led over 70 in-depth interviews with a cross-section of stakeholders from uranium communities, including: activists and leaders in sites of resistance and acceptance related to renewed uranium production; community council people and political leaders; representatives of each community's business and environmental organizations; representatives of the state Colorado Department of Public Health and Environment; key administrators of Energy Fuels, the largest uranium corporation in the US and owner of Piñon Ridge Mill; and a variety of other community members. I also distributed a survey instrument to residents of Nucla, Naturita, Paradox, and Bedrock in late 2010, asking questions about uranium production, industry regulations and legacies, and people's perceptions of renewed extraction near their communities. Extensive archival analyses included multiple readings and iterative coding of: uranium regulatory statutes; weekly media coverage in a variety of regional newspapers; socio-economic reports, site analyses, and baseline data analyses created by the Colorado Department of Public Health and Environment and Energy Fuels Resources; and literature, reports, and advertising created by various activist groups. Finally, I have spent extended time in the region since 2006, conducting participant observation in a variety of uranium communities.

This article analyzes one regional collection of sites of acceptance. However, echoing calls for reflexive science in Burawoy's extended case method (1998), I contend that notions of EJ motivating sites of acceptance in Nucla and Naturita offer important insights into notions of EJ that are increasingly common in communities throughout neoliberal contexts like the US that are also facing decisions related to energy and industrial production.

## 4. Paradox Valley, Colorado and Sites of Acceptance for Renewed Uranium Production

Nucla and Naturita nestle in the Paradox Valley, which is tucked into the sparse West End of southwestern Colorado's Montrose County, a landscape at once stark and beautiful. Towering red rock cliffs surround a lush agricultural pocket of verdant green, made possible by irrigation ditches Nucla's founders dug decades ago. The entire region's major land uses include natural resource-

based agriculture, recreation and tourism on public lands, and mining activity (CDPH/E EIA 2011; Montrose County Socioeconomic Impact Study [MCSIS] 2010).

Nucla, Colorado, is a tight-knit community of 732 people, with a poverty rate of about 24% (US Census 2009). Founded in 1893, the town was designed as an intentional community focused on progressive social ideals. Their charter asserted that free-market competition "makes it almost impossible for an honest man or woman to make a living, and the cooperative system, if carried out properly, will give the best opportunity to develop all that is good and noble in humanity" (Hessler 2011, 2). Naturita, Colorado, Nucla's sister city located just four miles north, has 635 people, a poverty rate of about 14% (US Census 2009), and is permeated by much the same western ruggedness and self-sufficiency. Piñon Ridge Uranium Mill's proposed site comprises 880 acres situated along Highway 90, a few miles from Nucla and Naturita. The site, privately owned by Energy Fuels Resources, Inc., had been reserved for agricultural grazing before Montrose County Commission rezoned it. A few houses and farms dot the landscape, but the mill will be constructed away from major population centers (MCSIS 2010). Plans for the facility include a 17-acre uranium mill, tailings ponds totaling about 90 acres, an administrative building, a 40-acre evaporation pond, access roads, and a six-acre storage pad for uranium ore.

Piñon Ridge Uranium Mill has attracted national publicity as the first US uranium mill permitted in over thirty years and because it has generated unusually strong public support in rural communities closest to the mill site, particularly in Nucla and Naturita (Hessler 2010). Mobilized support among nearby residents—advocating for the mill and for renewed uranium development more generally—has been instrumental in moving Energy Fuels' Piñon Ridge Mill paperwork through a complex and rigorous permitting process with the Colorado Department of Public Health and Environment, zoning commissions, and other regulatory agencies. Strong support creates a sociologically important site of acceptance of renewed uranium development, where alternative notions of EJ drive mobilization. As more predictable sites of resistance mobilize around Colorado and in Paradox Valley to fight renewed uranium production, Nucla and Naturita are significant as sites of acceptance, representing ways in which people conceptualize notions of EJ differently across spaces and places.

Nucla, Naturita, and other uranium communities across the Four Corners region have been the epicenter of US uranium production since World War II (Ringholz 2002; Power 2011), helping establish US as a military-industrial superpower (Amundsen 2002). Nuclear weapons development and Cold War weapons stockpiling led to a significant uranium boom from the mid-1940s to about 1960. Nucla and Naturita saw their populations grow from 1,200 people in 1930 to about 5,500 residents by 1960 (MCSIS 2010; Power 2011). Despite economic booms and an influx of people and profits to the Western Slope, uranium communities suffered prolonged bust periods (Ringholz 2002; Brugge et al. 2007). By 1960, the industry began to bust. Uranium mills that had once employed three shifts of people to operate around the clock closed permanently as the state retracted its subsidies. Naturita's uranium mill was closed in 1958 and though

an upgrader plant replaced it, it also closed by 1963. Even with a small boom in the 1970s, the 1980s marked the beginning of a chronic bust period in uranium markets (MCSIS 2010; Power 2011).

During this time, environmental health complications related to uranium surfaced. Community activists record on-going cancer clusters, respiratory ailments, reproductive disorders, and other health outcomes in uranium communities like Monticello, Utah, Uravan, Colorado, and chapters of the Navajo Nation (Clapp 1996; Brugge et al. 2006; Author 2010; 2011). Activists and some public health specialists connect clusters to long-term uranium exposure (Brugge/Buchner 2011), but these claims are often contested. Residents who connect their cancers to uranium exposure but have these observations contested by the state often experience subsequent shifts in worldview (Cable/Cable 1993), mobilizing sites of resistance, here to renewed uranium production (Malin/Petrzelka 2010). Given this political-economic context, we can appreciate the Piñon Ridge Uranium Mill's significance and the importance of a mobilized vocal, local site of acceptance utilizing different notions of EJ.

Though I have little space here to analyze them, multiple sites of resistance fight the mill's construction and mobilize to counter renewed uranium development.<sup>2</sup> Even before the mill was permitted by CDPH&E in January 2011, the Sheep Mountain Alliance organized a coalition of sites of resistance. In an open letter to CDPH&E, organizations comprising sites of resistance describe the Paradox Valley's beauty, calling it "the Grand Canyon of Colorado [...]. The approval of the mill would likely lead to degradation of the environment, economy, and health of the region." (Org Letter 2010, 1–2)<sup>3</sup> These sites of resistance reflect notions of EJ that privilege environmental health and advocate a precautionary approach to uranium development to assess potential impacts of heavy industrial practices.

## 5. Findings and Analyses

Residents across Nucla and Naturita have mobilized to support renewed uranium production and construction of the Piñon Ridge Mill. They create distinct sites of acceptance, an important contrast to sites of resistance typically analyzed by EJ scholars. Activists in these sites of acceptance express notions of EJ that privilege local autonomy related to land use decision-making, identification with uranium extraction, and uranium's 'green' role in nuclear power. These

<sup>&</sup>lt;sup>2</sup> This coalition of includes the Sheep Mountain Alliance (SMA), Paradox Valley Sustainability Association (PVSA), members of the Telluride Town Council and San Miguel County Commission, and groups such as Grand Valley Peace and Justice (GVPJ) and the Western Colorado Congress (WCC). GVPJ is an environmental health organization fighting for recognition of uranium's health-related impacts in the Grand Junction area, while WCC is a progressive EJ organization concerned with equitable use of land in Western Colorado.

<sup>&</sup>lt;sup>3</sup> Organizations in sites of resistance highlight the uranium market's instability: "In the past the uranium industry has proved itself to be an unreliable engine of economic progress, vulnerable to the vicissitudes of the energy market and prone to boom and bust cycles that leave behind destitute communities saddled with an additional burden of environmental cleanup." (Organization Letter 2011, 1)

conditions help create space for mobilization of strong, influential sites of acceptance. They also highlight important ways in which alternative notions of EJ emerge from impoverished "material relationships between human disadvantage and [...] the condition of the environment" (Schlosberg 2013, 51). Alternative notions of EJ analyzed below, then, highlight a central irony—in constrained contexts of material deprivation, natural resource dependence, and neoliberal hegemony, continued collective dependence on uranium markets is perceived by activists as their communities' most rational choice, and a choice that does not rob them of personal identity and local heritage. Environmental justice, it seems, truly is in the eye of the beholder.

A majority of local residents and community leaders in Nucla and Naturita mobilize sustained, organized support for the mill, creating sites of acceptance that is palpable in these communities. When I surveyed them, 74% of Paradox Valley residents expressed strong support for the mill's construction. Throughout 2009 and 2010, hundreds of community members attended multiple public meetings to voice their support. And my first sight when I walked into the Visitor's Center? That orange sign labeled "Yes to the Mill!!!", quickly echoed by four volunteers who offered well-crafted arguments about why renewed uranium extraction was vital to the region. Community sites of acceptance are so strong and well-organized that when I called to set up my fieldwork in Naturita, a resident said "You better not even think about coming down here if you're anti-Mill. They'll run you out of town." (I considered myself sufficiently warned.) The top right corner of the local San Miquel Basin Forum newspaper prominently displays uranium's stock prices. The New Yorker (Hessler 2010; 2011), New York Times, and other national media outlets have covered activists' veracity in these sites of acceptance and their instrumental role in persuading state officials to rezone agricultural land for industrial purposes and permit the mill. These sites of acceptance are strengthened and institutionalized by organizations like the Rimrocker Historical Society, the Western Small Miners Association, and the Nucla-Naturita Chamber of Commerce.

Below I analyze three key themes shaping activists' alternative notions of EJ, notions that help create conditions for strong sites of acceptance supporting renewed uranium production. They include identification with uranium production, persistent poverty and economic insecurity, and faith that increased uranium production will fuel US nuclear power production and help combat global climate change—if regional communities can help control how their land is developed and utilized.

# 5.1 Connection to Industry: "It's our identity... It's our history. You know, it's who we are."

Citizens mobilized in support of the Piñon Ridge Uranium Mill identify strongly with uranium, even if they were never economically tied to the industry. They see uranium as symbolic of their region, their home. Their identification with uranium leads mobilized citizens to view industry renewal as a form of EJ, allowing them to utilize their natural wealth, rich landscape, and ready infrastructure

to rebuild their local culture around an industry they feel they know better than most other Americans. Many mobilized residents argue that renewed uranium production would bring back a sense of community, reinvigorating historical connections to the natural landscape—and marking another important element of alternative notions of EJ.

My interviews illuminated people's central identification with uranium, who see it as vital to community health and vibrancy. One thirty-year Nucla resident and civic activist captured how deeply Nucla and Naturita residents identify with uranium as a source of community when he observed:

"Locals consider [our]selves to have a different relationship with uranium than 99% of Americans. We [locals] understand it better [...] We know that we live in a unique area, that we have the [Uravan] Uranium Belt [...] This mill will be a good thing for our community, just to bring us back to some sort of normal point where we can call ourselves a community, we can have a school we're proud of, our kids will have a place they can be proud of because right now we're struggling with that."

As this statement represents, mobilized citizens feel that renewed uranium production would not simply provide an economic jolt for the area—but would also revitalize the *community*. Another lifelong Nucla resident, who works as an environmental quality monitor for regional mining projects, echoed these observations and countered more traditional notions of EJ when he said: "I don't want to say anything derogatory about the Telluride people, but they might be a little bit too knee-jerky on this stuff and most of them seem very uneducated as far as radiation." People's positive experiences and familiarity with uranium, fortified by their identification with it, help form alternative notions of EJ and mobilize sites of acceptance in Nucla and Naturita.

Recalling their experiences with uranium and articulating alternative notions of EJ, residents find comfort and community in the uranium embedded in their local landscape. A fourth generation Naturita resident and local tourism employee articulated this common sentiment when she said, "My philosophy is, and it was my Dad's [...]. He said, this is God's land, God gave us uranium to support us, to take care of our families, like he gave Telluride<sup>4</sup> skiing snow and Moab sand dunes and rocks [...]. We've lived with it, so we're not afraid of it." Another local resident—a prominent healthcare practitioner, lifelong Uravan and Nucla resident, and advocate for uranium renewal—explains his identification with uranium and community-wide notions of EJ:

"We have been around it [uranium], we're not afraid of it, and we don't have any preconceived notions that it's dangerous [...] I hear people say we just need the jobs, and it makes me angry because this country needs us as much or more than we need the jobs. We're one

<sup>&</sup>lt;sup>4</sup> Telluride is a community about 60 miles east of Nucla and Naturita, and an important central location for sites of resistance to uranium production's renewal and the mill. The Sheep Mountain Alliance is headquartered in Telluride.

of the few places that would ever consent to do this because we know it." (emphasis original)

Clearly, support for renewed production extends beyond desire for economic growth, but instead represents the essence of community.

Their own positive experiences with uranium make activists skeptical that it has detrimental impacts on environmental health, counter to notions of EJ expressed in sites of resistance. In 1986, Uravan, a former Union Carbide company town, was declared a Superfund site and evacuated by the federal government, with the 600-person population relocated to surrounding areas. Each of Uravan's 260 structures were burned to the ground, and there is an on-going class action lawsuit brought against Union Carbide by former employees and residents for illnesses like various cancers they relate to uranium exposure. Yet, activists creating Nucla and Naturita's sites of acceptance give little credibility to claims of negative health impacts (Hessler 2010). A recent epidemiological study (Boice et al. 2007), commissioned by Union Carbide, found no statistically significant levels of increased cancer among Uravan millers or community members, though elevated rates of lung cancer were found among former miners. Most people I interviewed in active in sites of acceptance cited this study to deny claims of negative health impacts. Advocates of the study include the region's only pharmacist, who is a highly influential community member, outspoken driver of these sites of acceptance, and new national figure (Hessler 2011).

Historical relationships with uranium production fortify connections mobilized supporters feel to the landscape. Observed one area resident and vocal advocate for renewed uranium production: "The only reason these areas were developed and settled in the first place is because of the existence of uranium. So our history, heritage, our families, everything at some point strongly tie to uranium." At rallies and public meetings, residents expressed identification with uranium regardless of their age, occupation, or gender. Hundreds of former community members, uranium miners, and millers attend the Rimrocker Historical Society's annual Uravan Survivors Picnic each spring on the grounds of the old town. At these events, mobilized uranium industry supporters wistfully recollect early uranium communities like Uravan, longing for childhoods spent at the company store, school, or swimming pool. They often tie these fond memories to uranium itself. Many activists and public meeting attendees identify themselves as 'fourth generation' residents and uranium workers, alluding to their family's long-term history in the region. People pleaded to return to the 'Union Carbide Days' or 'Uravan Days' at several public comment sessions (Public Meeting 2010a) and in my interviews with 'fourth generationers'.

Activists mobilizing sites of acceptance identify with potentially positive cultural and community impacts of the uranium industry renewal more than they fear its potential and historical environmental risks. Their alternative notions of EJ thus center on their concerns with community participation in land use decision-making, specifically community members' perceived right have to interact with their natural landscape in a way they deem safe, familiar, and fair.

## 5.2 Community-Led Economic Security Amid Persistent Poverty: "How much longer can you hold on with nothing?"

Mobilized supporters of Piñon Ridge Mill see renewed uranium production as a community-based way to reduce economic inequality, diminish their persistent poverty, and secure their rural livelihoods. As analyzed above, mobilized supporters view the mill as a chance to reclaim the 'Uravan Days' (Public Meeting 2010a), with more infrastructure, better schools, and more local businesses catering to medical, cultural, and shopping needs. In communities where the middle school is up for sale and where residents report that poverty rates are close to 40%, residents see renewed uranium production as a way to use their natural wealth to ameliorate persistent economic poverty.

Mobilized residents repeatedly cited key socio-economic reports<sup>5</sup> that cultivated their support for uranium renewal. Montrose County's Socioeconomic Impact Study (MCSIS 2010) concludes that increased uranium mining and milling in the area could potentially create 516 to 649 new jobs in the county, due to demand for infrastructure and services. The county projects new workers would increase residents in proximate communities by 32 to 46 percent, while suggesting that most jobs will pay \$60,000 annually and will be given, importantly, to area residents. While alternate socioeconomic reports estimated that only 35–40 jobs will be directly created by the mill (Power 2011), Energy Fuels Resources commissioned several other reports that projected numbers much closer to Montrose County's initial report.

Mobilized supporters see renewed uranium production as a chance for community reinvigoration even with the industry's boom-bust history. In fact, many see uranium as one of the few options the community has to fight persistent poverty and attain economic stability. One mobilized Naturita resident and service industry worker observed that people are hopeful financial gains from a boom would be handled responsibly:

"I hope that when [...] we do boom, we're smart enough to invest in our future. We have to have revenue on tap to still bring in any new industry. We've tried and tried but without capital to bring them [other industries], there is no hope to bring them [...]. If the mill doesn't go in, I don't know how much longer the area can hold on [...]. It's like, how much longer can you hold on with nothing?"

As this comment indicates, persistent poverty helps structure alternative notions of EJ, which include community-level control over land use decisions that others may deem too risky.

One Naturita community leader and vocal mill advocate observed how the mill's economic promise reinvigorates people's enthusiasm, drawing residents out of isolation created by chronic poverty plaguing regional uranium communities since the early 1980s. She observed:

<sup>&</sup>lt;sup>5</sup> While these assessments have been critiqued by mobilized opponents, impoverished communities and their mobilized supporters of the mill interpret the report results more optimistically.

"It's really awesome how people come together and support one another and believe in a vision and a hope. Because that's all we ever have. We have been in a bust [economically] more than a boom. So people are visionaries, they have a strong sense of community spirit. I mean, there are tears and cheering and excitement [...]. Sometimes people would rather pull and fight and scream with each other instead of holding together, so these rallies have been awesome [...] because then everybody comes together and I think they feel a strong sense of community more than they did before that."

As this community leader illustrates, sites of acceptance in Nucla and Naturita has been inspired by a chance to diminish persistent poverty and economic inequality. Her observations are especially important in identifying alternative notions of EJ, showing how residents see economic growth as important for its contributions to community and economic well-being.

Another long-time Nucla resident and mill supporter noted that renewed uranium production and the mill would breathe life into a place deprived by poverty for decades. He clarified this notion of EJ:

"I think of the Nucla and Naturita area as a sponge. And all we're asking for is a little moisture to bring us back to some semblance of normalcy. Because you're here, you see what our downtown area looks like, you see what our residential areas look like, and it's not a normal community. It's the opposite extreme. And all we're asking for is an opportunity to bring some sort of normalcy back to our community [...]. I think this mill would be a good thing for the community."

Key to this alternative notion of EJ, community members like this interviewee see particular sorts of land use, here uranium production, as just mechanisms for accessing their natural wealth to reduce widespread poverty.

Though spatial and structural constraints make organized mobilization challenging, concerns about community impacts of intense material deprivation motivate vibrant sites of acceptance around the Paradox Valley. Said one long-term Nucla resident and mobilized supporter when explaining his activism:

"Coming together to make a movement is not easy. With the mill, though, we made it happen, had dozens of public hearings and meetings in Montrose County. So that's where a lot of the locals live and where a lot of the folks that are in support of the mill live. So it's been easy to jump on the band wagon, which is good because we need a collective movement in favor of what we need to do to be successful and survive out here."

Residents' daily experiences with persistent poverty structure support for renewed uranium production. Daily deprivation helps shape alternative notions of EJ where local control over land is seen as a necessary right for persistently poor communities surrounded by abundant natural wealth.

# 5.3 Environmental Sustainability: "Uranium and nuclear power will fight global warming."

Mobilization in sites of acceptance center on a final alternative notion of EJ—that nuclear power may have positive environmental effects. Activists and community members argued that renewed uranium production will facilitate US nuclear energy development and allow us to respond quickly to global climate change. Many activists expressed the notion that renewed Four Corners uranium production was also a more just, responsible, and patriotic way for US companies to source energy.

One vocal mill and industry advocate, healthcare practitioner and long-time resident of Nucla, sees the mill as a way for Nucla and Naturita to help the US address climate change:

"We're putting so much carbon dioxide into the air that the earth is dying. The data is pretty conclusive [...]. Pretty soon, our area is going to become a desert because of lack of water and heat. All over the world, you're seeing impacts from global climate change. The only thing that's going to stop it is nuclear power. Only nuclear power can come online fast enough, and it doesn't create carbon dioxide [...]. And we have the uranium to do it right here [...]. It provides jobs, that's great. But the bigger thing is, this is the place that's needed to help supply nuclear reactors because this is where the uranium ore is and you don't have to transport it very far."

As this sentiment represents, mobilized supporters feel motivated by environmental concerns, even if notions of EJ promulgated through them are different from those captured in empirical research thus far.

Mobilized mill supporters consistently expressed pride in the role Nucla, Naturita and other uranium communities might play in helping the US address climate change. For them, this was a key component of their notions of EJ, where wealth embedded in local landscapes could be utilized safely and, in their eyes, patriotically. Another lifelong Nucla resident, supporter of the mill, and natural resource worker articulated this perspective, common among mobilized residents, when he said:

"It really angers me when people sit and say 'We can't do this, it's too dangerous' with the full knowledge that the US uses 40–50 million pounds of uranium a year. And it's probably our greenest electricity source right now. Especially as far as global warming, carbon dioxide emissions, you can't beat nuclear. [...] We can go underground, we can mine uranium, and we can produce a commodity for this nation that we desperately need. And we can do it safer than anybody else in the world [...]. So if we don't produce our own, where do we get it? [...]. It's hyporcritical to say 'Let's go in to the third world countries to kill their people!' even though we can do it safely."

As this observation represents, mobilized activists think renewed uranium development provides a global environmental benefit that would reduce instances

of environmental injustice in developed countries where the industry is less regulated and workers face increased risks as a result.

Across uranium communities, notions of EJ and mobilization for the mill were founded on ideas that Nucla and Naturita might rekindle their uranium heritage in an environmentally progressive way. One Nucla resident, business owner, and mobilized supporter of the mill reflected this common perception among my interviewees when she said: "I think the people who live in this area are favorable toward it [the mill] because they feel like they're not only going to help ourselves and our local economy, but they're helping the nation do something positive to help develop our energy systems." Another Naturita resident and mill supporter felt the mill and renewed uranium production would establish the US as a leader in climate-sensitive energy production:

"I look at it from a bigger picture than jobs. I think one of the major benefits of the mill is that it will send a statement to the rest of the world that the US is serious and able to deal with nuclear energy production, that we can do it under current regulations, do it responsibly, and still get it done."

Alternative notions of EJ utilized in sites of acceptance, then, connect regional uranium production increases to climate change policies that will empower nations to shape sustainable energy portfolios.

As this section illustrates, mobilized sites of acceptance do not simply result from economic need in persistently poor communities, then, but connect as well to larger-scale environmental concerns and notions of EJ. Through this case, we observe different yet equally valid notions of EJ, where mobilized citizens define justice in terms of community-level access to natural wealth embedded in their landscapes, parity in land use decision-making, strong historical identification with the resource industry, and perceptions that nuclear power provides a just path to climate-friendly energy policies.

#### 6. Discussion and Conclusions

## 6.1 Notions of EJ Utilized by Community Members

Notions of EJ expressed by activists mobilizing sites of acceptance diverge markedly from notions of EJ described by activists creating sites of resistance. Mobilization in sites of acceptance operates under a central notion of EJ-community control over land use decision-making should be prioritized, so that natural wealth in local landscapes can be utilized to ameliorate persistent poverty in nearby communities. Activists argue that to deny communities local-level procedural equity and autonomy over land use decisions represents the keenest form of environmental injustice for them, robbing them of means to address various forms of persistent material deprivation. Notions of EJ expressed in sites of acceptance reflect residents' strong attachments to their landscape and communities, strong identification with the industry involved, and staunch beliefs

that renewed production activity will be environmentally beneficial. Yet, they represent an important assumption, analyzed below, that renewed uranium production will enhance *local* control over land use.

Above, I have analyzed three important considerations of activists that help inform their alternative notions of EJ. First, mobilized residents expressed strong identification with the uranium industry, tied to local landscape and economic history. Even with uranium's negative regional legacies and palpable risks from industry revitalization, sites of acceptance are so strong because residents identify with the industry. Since many mobilized residents reported perceiving uranium more rationally than most (radiation-fearing) Americans, their identification with the industry helps create a collective perception that it is their collective right to develop that uranium in a way that resonates with local identities and community social fabrics.

Second, persistent poverty has had a debilitating and alienating influence in Western Slope communities like Nucla and Naturita, where people's daily quality of life is diminished by spatial isolation and resource deprivation. Residents consistently expressed the view that uranium production's renewal would embody their notions of EJ, allowing residents to address their poverty while giving them the opportunity to access and redistribute uranium wealth embedded in the landscape all around them. Finally, activists saw uranium as an environmental 'good' rather than an environmental 'bad', which they believe could contribute to a green energy economy in the US. In this way, they believe their communities and their landscapes' wealth could meaningfully contribute to nuclear power production, which they viewed as an environmentally just activity that would allow the US to more proactively and responsibly address global climate change. Interestingly, then, alternative notions of EJ utilized in these sites of acceptance did not mobilize only due to concerns over economic justice but to broader community and environmental concerns as well.

#### Conditions for Sites of Acceptance

Material conditions, especially persistent poverty and natural resource dependence, nurture alternative notions of EJ in sites of acceptance. Chronic economic recession and persistent poverty in the Four Corners region led to a loss of community, loss of population, and ultimately a lack of autonomy over quality of life, economic development, and community well-being. Combined with natural resource dependence, persistent poverty helps nurture notions of EJ that privilege issues of governance—namely, local autonomy over how communities can access material wealth embedded in regional landscapes. With little power or autonomy over other aspects of economic life, residents in uranium communities like Nucla and Naturita view land use decisions as rare opportunities to define and experience justice in their local environments. Sitting at the intersection of economic poverty and a rich wealth of land, space, and natural resources, residents develop alternative notions of EJ that privilege local control of that land.

Natural resource dependence also creates conditions for sites of acceptance and alternative notions of EJ, especially given that historical economic depen-

dence helps facilitate residents' identification with uranium production while constraining other development options. Residents assert that industry expansion will facilitate environmental justice, because they believe their communities will play direct roles in deciding how development will unfold and because most other economic choices also depend upon natural resource extraction.

In communities like Nucla and Naturita, where extensive public meetings have been held to gather public comments, many mill supporters I interviewed and surveyed reported feeling that they were being heard and acknowledged and felt some power regarding local land use. Yet no effort has been made to create formal mechanisms whereby communities or residents can meaningfully contribute to decisions about local land use. For example, Energy Fuels Resources and Colorado Department of Public Health and Environment had the mill's permit suspended and challenged in court because they did not hold adequate public hearings where citizens could genuinely participate in decisions and question company representative. In this way, and again with great irony, the very structural and economic limitations that create natural resource dependence also help nurture acceptance of industry renewal.

Conditions nurturing sites of acceptance become even more pronounced in neoliberalized contexts like the US, where social protections and programs are increasingly scarce and where economic survival is precarious. In this market-based context, uranium's historical role and people's identification with the industry provide cultural frameworks that facilitate sites of acceptance supporting privatized uranium markets. Privatization of uranium markets also makes expansion more acceptable to supporters, especially given the state's historic role in uranium's negative legacies and normative narratives of self-sufficiency. If residents can help reinvigorate corporate-driven uranium production, many see this as a positive step away from state legacies and toward self- and community-sufficiency in neoliberalized contexts.

How does neoliberalism nurture alternative notions of EJ? Neoliberalism has shaped US policy for over three decades and developed alongside EJ mobilization. Via neoliberalism's normalization—or its hegemonic status (Gramsci 1971)—we see a "triumph of market ideology: the notion that markets are the best, most efficient, and socially optimal means of allocating scarce resources in virtually all realms of life" (Leitner et al. 2007a, 225). As individuals internalize norms of neoliberalized society, notions of justice can shift and lead people to "normalize logics of individualism and entrepreneurialism, equating individual freedom with self-interested choices, making individuals responsible for their own well-being, and redefining citizens as consumers and clients" (Leitner 2007b, 2) even in contexts of EJ. Given neoliberalism's hegemonic power in the US, most Americans normalize this notion. This is no different for Nucla and Naturita

<sup>&</sup>lt;sup>6</sup> Neoliberalism remains a widely contested term, so here I also use the that term as well as 'neoliberalized/-ization'. Neoliberalization captures the contingent nature of neoliberal processes and policies, which vary across cultures, ecosystems, and political-economic contexts. Neoliberalism manifests in three major ways: a philosophy of free market superiority; a policy discourse, including core values like privatization and marketization; and a set of policy measures, like free trade policies and devolving federal tasks to states and localities (Castree 2010).

residents, who have additional constraints like persistent poverty and natural resource dependence that make this worldview persuasive. As atomized individuals with few safety nets, mobilized residents in sites of acceptance see renewed uranium production as a mechanism to alleviate their persistent poverty in a familiar, self-sufficient, and (as they see it) environmentally responsible way. And with Energy Fuels promising gainful employment, residents begin to perceive that corporation as a provider of privatized social safety nets that may alleviate persistent poverty.

## 6.2 Sites of Acceptance vs. Resistance—Transformative EJ or Inequality Just the Same?

While alternative notions of EJ may be valid and completely rational for individuals in sites of acceptance, the transformative potential of alternative notions of EJ remains suspect. By rejecting increased industrialization and its potential risks, activists in sites of resistance argue for fundamental changes in economic inequality, energy policy, and environmental health; they want fundamental shifts in social inequality and precaution in allowing people's exposure to risk. Activists in sites of acceptance like Nucla and Naturita, however, do not fight for such fundamental social changes and instead hold less transformative notions of EJ. In viewing industrialized processes and their risks as acceptable, these activists utilize notions of EJ that make sense given their economic, spatial, even political constraints. But these views do little to change power inequalities experienced by peripheral communities like Nucla and Naturita.

Other researchers have noted social activism's profound importance in initiating transformative changes to social structure—and in facilitating meaningful mechanisms for local control over land use. For example, using fair trade coffee and third-party certification measures, Jaffee (2007; 2012) displays how social movements—and their ability to re-embed markets in social contexts (Polanyi 1944)—are 'co-opted and diluted' as markets increasingly dictate social relations and power dynamics. Jaffee parallels his findings with Bartley's (2007) observations about forestry certification: "Firms typically prefer weaker commitments with minimal enforcement, while social movements prefer stronger, binding standards." (Jaffee 2012, 110)

Hoping to acquire community autonomy over their own development, however, activists in Nucla and Naturita mobilize sites of acceptance that expect a corporation, Energy Fuels, to provide social safety nets and alleviate persistent economic concerns. As the target of residents' activism, Energy Fuels plays a powerful role in structuring how land is used via modes and relations of production within those communities. In other words, by targeting Energy Fuels, Nucla and Naturita residents still do not guarantee they will experience increased community autonomy over land use decisions. Given the industry's privatized markets it is highly unlikely that residents living nearest the Piñon Ridge Mill would experience greater degrees or better quality of local involvement in land use decisions than they do now, and the recent controversy over public participation in the mill's permitting highlights this concern. Little transformative

change can occur, then, either in terms of lessening persistent poverty or realizing their alternative notions of EJ. In a very real sense, even the community autonomy that activists strive for becomes 'co-opted and diluted' as Energy Fuels controls the terms by which land is developed and its wealth extracted, even if community members feel their needs align with the company's and their views were considered during zoning, permitting, and other hearings.

Structurally, new corporate targets and new goals of activists are symptomatic of a neoliberal shrinking state, already remote to spatially isolated uranium communities, where activists must address private institutions like Energy Fuels Resources to assuage their persistent poverty. This shift fundamentally changes social movement organizations' transformative potential, here negating activists' abilities to reshape structural dynamics like natural resource dependence that have historically marginalized them and contributed to their persistent poverty. As analysts of the radical Right to the City Alliance observe: "Transformative organizing works to transform the system, transform the consciousness of the people being organized, and in the process transform the consciousness of the organizer." (Mann 2011, x) In this new "social movement ecology" (Jaffee 2012, 112), organizations can be co-opted and their goals diluted even if they are motivated by alternative notions of EJ.

Do alternative notions of EJ represent genuinely different conceptions of *justice*, then? In many ways, yes; activists mobilizing sites of acceptance in Nucla and Naturita advocate for local needs, community well-being, and their relationship to the land. In these ways, notions of EJ utilized in sites of acceptance stretch what is meant by EJ while staying true to overarching concerns that notions of EJ address "the material relationships between human disadvantage and vulnerability and the condition of the environment and natural world in which that experience is immersed" (Schlosberg 2004, 51).

That said, alternative notions of EJ still do little to transform natural resource dependence, alleviate persistent poverty, or address the lack of economic diversification that accompanies dependence; they do not represent transformative notions of justice, in other words. While much of this is out of the hands of individual residents, mobilized groups could help initiate alternative, smaller-scale energy systems (like a current co-op solar installation in Paradox Valley); community-supported agricultural projects; or even uranium mine remediation projects as alternative means of economic development and structural change. These have not been the goals of activists thus far, however, which shows the power of neoliberal norms to dilute the goals of social activists. Thus, the productive empirical question becomes not 'Is this environmental justice?' but instead 'To what degree have neoliberal norms and material conditions shaped notions of justice in communities facing persistent material deprivation?'.

As unconventional energy development accelerates rapidly in the US, and as it encroaches upon an increasing number of communities, it becomes even more urgent to understand alternative notions of EJ. While strong sites of acceptance clearly emerge in uranium communities, this study is limited by its depth. I urge scholars to explore these outcomes across various energy and environmental sectors. Do we see mobilized sites of acceptance in response to hydraulic

fracturing for natural gas, for example? Or in response to mountaintop removal for coal extraction? Further, outside of energy development, do we see similar divergence in other economic sectors, like banking, healthcare, or finance? As contemporary economies and societies rapidly shift, sociologists have vital roles to play in analyzing alternative notions of EJ, their relationships to divergent forms of activism, and the transformative potential of both.

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